

David ROXBURGH, *et al.*
Serial No. 10/594,124
January 28, 2009

REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

In response to the request for adding proper antecedent basis to the specification for the claimed “computer-readable storage media” at claim 18, an additional insert has been added at the top of page 6. As the Examiner will no doubt appreciate, the description there is simply in line with what one having skill in the relevant art would have understood the applicants to be describing in terms of hardware required to run stored program instructions from computer-readable storage media. Accordingly, no “new matter” is believed to be presented.

The rejection of claims 2-6, 8 and 16 under 35 U.S.C. §101 because they are allegedly directed to non-statutory subject matter is respectfully traversed.

Independent claim 16 already clearly recites an apparatus (i.e., a “machine”) under 35 U.S.C. §101. The claim starts out describing a “system” as well as a gateway and two sub-systems (a first for offering services via the gateway and an application hosting sub-system also connected for communication via the gateway. Claim 16 also already specifically recited arrangements to permit initiation of a secure and authenticated connection via a non-secure data network connection, etc. As those skilled in the relevant art well understand, such terminology refers to apparatus (as well as apparatus

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configured by suitable stored program code structure to effect the recited functionality when the code is executed). For the Examiner's convenience and the record, a few print-outs from Wikipedia for terms such as "telecommunications," "gateway", "host" and "internet hosting service" are attached.

Clearly, it would be impossible to satisfy the limitations of claim 16 with merely "functional descriptive material" or "non-functional descriptive material."

Nor have the applicants claimed merely abstract ideas, stored on a computer-readable medium, in a computer (or on an electromagnetic carrier signal). Instead, the applicants have described and claimed a system of programmed computer devices which execute program code to provide various identified sub-systems and a gateway inter-connecting the same via a data network. Such subject matter is a distributed "machine" and thus clearly falls within the statutory class of patentable subject matter under 35 U.S.C. §101.

The rejection of claims 16-18 under 35 U.S.C. §112, 1st paragraph, is also respectfully traversed.

The Examiner alleges that there is no basis for the added limitations "when the notification means is requested to so do by any one of the services offered by the first sub-system" or "sending a request from a service wishing to set up a secure and

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authenticated connection to an application hosting sub-system." However, this is incorrect. For example, the Examiner is referred to the specification at page 11, lines 5-9, and page 14, lines 13-14, and further on page 14 at lines 17-20, as clear bases that the inventors had possession of these features at the time of writing the application – and that such would have been so understood by a reader skilled in the relevant art:

“Upon receipt of the reply SMS 440, service plug-in 257 ‘drops’ an ‘event’ on to the JMS Queue 215, which event specifies that a notification is to be sent to application 110 requesting it to contact the SMS service plug-in 257. Subsequently, the notification server 220 takes the event off the JMS Queue and processes it (in a manner to be described in greater detail below).” [Page 11, lines 5-9.]

“The method then proceeds to step 525 in which the generated notification request message is sent to the notification server using the Java Messaging Service.” [Page 14, lines 13-14.]

“Upon consumption of the notification message by the notification server, the notification server processes the request and generates and transmits to the appropriate application listener a notification in the form of an XML document.” [Page 14, lines 17-20.]

The Examiner also questions sufficient enabling disclosure of the “computer-readable storage media containing a program or suite of computer programs for controlling one or more computer processors...” etc., as recited in claim 18. The

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Examiner alleges that such was not described in the original application in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

First of all, the Examiner is respectfully referred to this exact teaching at original claims 14-15. In addition, as noted above, those having skill in the relevant art of telecommunications would clearly have understood by reading the original specification with their ordinary skill as of 2004 that the applicants were indeed in possession of a described invention which defined a system comprising programmed computer devices which execute program code stored on computer-readable storage media containing a program or suite of computer programs for controlling and effecting the various recited sub-systems, gateway, etc. Indeed, the various hardware components of the applicants' described system in the original application would be well known in 2004 to those having skill in the telecommunications art. So far as the undersigned is aware (including a first computer programming experience in 1959), all program computer devices must fetch executable program code from computer-readable storage media containing the program code. If the Examiner knows of any other way to cause a computer-implemented process to take place, it is respectfully requested that such be explained.

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In the very first sentence of the original application, the applicants make clear that the invention to be described relates to method and apparatus for transmitting data between computer devices. Thereafter, there are repeated references throughout the specification to the described “system,” “gateway,” “platform,” “mobile network,” “data network,” “server machines,” “database” (e.g., see the symbol for a storage media 152 in Fig. 1), incorporation by reference of copending European application No. 01308317.5 (corresponding to copending related U.S. Serial No. 10/488,777 published as US2004/0249944 A1) for more detailed description of certain hardware components, a “GSM” mobile telephone network 310,” a “mobile location centre 312,” “an “SMS center 314,” a “mobile network infrastructure such as base stations and associated broadcasting masts 305 interconnected by a data network and interfaced with various other telecommunications and data networks,” “GSM mobile phone 20,” “personal computer 10,” “handset 20,” etc. Clearly, those having skill in the relevant telecommunications art would have no doubt that the applicants possessed, in 2004 when originally filed, a system comprising programmed computer devices which execute programmable code from computer-readable storage media, etc.

The rejection of claims 2, 8, 16 and 17 under 35 U.S.C. §102 as allegedly anticipated by Grantges ‘464 is respectfully traversed.

Grantges is only concerned with how to make incoming connections more secure. There is no discussion of any notifications being sent from a notification server on behalf of a service "behind" the gateway. In fact, it is unclear what the Examiner thinks corresponds to the "notifications" of applicants' invention. If this ground of rejection is continued, it is requested that the alleged "notifications" of Grantges be particularly identified.

Grantges is entirely complementary to applicants' invention. For example, one could add a notification server to the system of Grantges and it could become an implementation of applicants' invention, with the Grantges system providing a nice way of setting up secure connections from the application hosting sub-systems (i.e., the client device 18/22 in Grantges) to the services offering first sub-system (i.e., the applications 28/30 in Grantges).

However, Grantges does not perceive a need for notifications to be sent to the users 18 because the services provided by applications 1, 2 and 3 are presumably conventional services adhering to a classic client/server model where servers simply respond to an input request from a client (the only mention of the applications that can be found is at 5:24-30). There is no suggestion that Grantges might ever need to send a notification

to a user; nor, accordingly, is there any discussion of any mechanism for sending such notifications.

To generally appreciate differences between applicants' claimed invention and known prior art systems, it is important to form a mental image of the main integers of applicants' claims and how they relate to one another. In overview, such an image needs to be along the lines of either Figs. 1 or 2 of this application. A first sub-system 250 hosts a number of services 255, 256, 257, all of which can be contacted (in a basically normal client/server manner) through the horizontal services layer 252 (this is, in essence, the gateway). In parallel with the horizontal services layer 252, there is also a notification server discussed below. Finally, some applications (hosted on one or more application hosting sub-systems) not only want to contact the services 255, 256, 257 from time-to-time (as per conventional systems), but also want to receive notifications from these services from time-to-time when appropriate.

Since a system requires fairly complex functionality to be able to set up a connection initiated by someone else in a safe and secure manner (note this is the functionality provided by the horizontal services layer 252 in Fig. 1), it is normal for the services 255, 256, 257 to not have any mechanism for directly contacting what are effectively their clients. Thus, normally, if a service has any notifications for sending to a client, it simply

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waits until that client next contacts the server and then lets it “know” that there is a notification waiting for it.

However, in the presently claimed invention, there is added a notification server which can pass a simple (non-secured) message to any of the applications (i.e., the clients) and let them know to contact the notifying service. This does not require any complexity on the part of the applications (i.e., the clients) and is safe.

Thus, the claimed architecture enables a plurality of services (255, 256, 257) to offer their services in a secure manner, with the ability to notify their clients (110, 120, 130, 140, 150) when necessary – and all of this is done in an efficient manner whereby the services do not need to worry themselves about how to implement either the security requirements (252) or the notifications (220) since this is all handled centrally by the gateway layer (200 - especially 252 and 220) and the clients do not need any complex functionality to allow a connection to be set up by a third party in a secure manner.

Given such fundamental deficiencies of Grantges with respect to features of independent claims 16 and 17 already discussed, it is not necessary at this time to detail additional deficiencies of this reference with respect to other aspects of the rejected claims. Suffice it to note that, as a matter of law, it is impossible for any reference to anticipate a claim unless it teaches each and every feature of that claim.

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The rejection of claims 3, 6 and 18 under 35 U.S.C. §103 as allegedly being made “obvious” based on Grantges in view of Gupta ‘384 is also respectfully traversed.

Fundamental deficiencies of Grantges have already been noted above – and are not supplied by Gupta. Accordingly, it is not necessary at this time to detail additional deficiencies of this allegedly “obvious” combination of references. Suffice it to note that, as a matter of law, it is impossible to support even a *prima facie* case of obviousness unless the cited references relied upon at least teach or suggest each and every feature of the rejected claims.

The rejection of claim 4 under 35 U.S.C. §103 as allegedly being made “obvious” based on Grantges in view of Nishizawa ‘906 is similarly respectfully traversed.

Once again, fundamental deficiencies of Grantges already noted with respect to a parent claim are not supplied by Nishizawa. Accordingly, it is not necessary at this time to detail additional deficiencies of this allegedly “obvious” combination of references with respect to other features of this rejected claim.

The rejection of claim 5 under 35 U.S.C. §103 as allegedly being made “obvious” based on Grantges in view of Osterman ‘211 is also respectfully traversed – for similar reasons. Namely, Osterman does not teach or suggest the deficiencies of Grantges already noted above with respect to a parent claim. Accordingly, it is not necessary at

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this time to detail additional deficiencies of this allegedly "obvious" combination of references with respect to the additional features of this rejected claim.

Accordingly, this entire application is now believed to be in allowable condition, and a formal notice to that effect is earnestly solicited.

Respectfully submitted,

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